

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method for causing a physical modification to a machine-readable medium having encoded thereon data representative of a hierarchy, the method comprising:

making a Web page available for access by a user at a first client, the Web page including

(i) locally-stored data representing the hierarchy and

(ii) rules defining those modifications to a structure of the locally-stored data

representing the hierarchy that any user is permitted to make to the data;

receiving, from the user, instructions to modify the structure of the hierarchy in real-time;

performing local rule enforcement at the first client by verifying that a proposed modification to the locally-stored data complies with the rules; and

detecting at a server, in real-time, a modification to locally-stored data occurring at a second client;

sending a call from the first client to the server to enforce rules involving multiple users based on detecting the modification to locally-stored data that occurred at the second client, the call being sent before the modified data has been saved to a master representation of the hierarchy on the server; and

causing the physical modification of the machine-readable medium, the physical modification resulting in the master representation of the hierarchy.

2. (Canceled)

3. (Previously presented) The method of claim 1, wherein performing local rule enforcement comprises comparing a first data element of a first member of the hierarchy with a

second data element of a second member in the hierarchy to identify a possible conflict between the first data element and the second data element.

4. (Original) The method of claim 3 wherein the possible conflict comprises the first data element being identical to the second data element.

5. (Original) The method of claim 3 wherein the first and second data elements comprise an identifier.

6. (Original) The method of claim 5 wherein the identifier comprises at least one of a member code and a member description.

7. (Canceled)

8. (Previously presented) The method of claim 1 further comprising generating an audit report including information corresponding to the real-time modification.

9-10. (Canceled)

11. (Previously presented) The method of claim 1, further comprising determining the real-time modification conflicts with the other modifications occurring at the other Web pages and preventing the real-time modification.

12. (Previously presented) The method of claim 1, further comprising performing master data rule enforcement to enforce rules for modifying master hierarchical reference data that is separate from the locally-stored data.

13. (Previously presented) The method of claim 12 wherein performing a master data rule enforcement comprises determining that the real-time modification conflicts with an entry in stored master data; and preventing the real-time modification.

14. (Previously presented) The method of claim 1, further comprising:
determining absence of a conflict; and
storing the modification.

15. (Original) The method of claim 1 wherein the data representing the hierarchy is a first set of data representing a first hierarchy, the method further comprising making available a second set of data representing a second hierarchy.

16. (Previously presented) The method of claim 15, further comprising receiving, from the user, instructions to move a portion of the second set of data to the first set of data.

17. (Original) The method of claim 16 further comprising preventing a modification to the moved portion of the second set of data.

18. (Original) The method of claim 16 further comprising maintaining an original hierarchical relationship of the moved portion of the second set of data in the first hierarchy.

19. (Previously presented) The method of claim 16, further comprising automatically updating the moved portion of the second set of data in the first hierarchy in response to detecting a change to a portion of the second set of data in the second hierarchy corresponding to the moved portion of the second set of data in the first hierarchy.

20. (Previously presented) The method of claim 1, receiving, from the user, instructions to establish an arrangement of a portion of the hierarchy.

21. (Original) The method of claim 20 further comprising storing the arrangement of a portion of the hierarchy.

22. (Original) The method of claim 1 wherein one of the rules comprises a conflict check.

23. (Original) The method of claim 1 wherein one of the rules comprises preventing the modification if the user does not have permission to make the modification.

24. (Original) The method of claim 23 further comprising establishing permission using an ownership attribute.

25. (Original) The method of claim 1 further comprising generating a report based on transactional data and the data representing the hierarchy.

26. (Original) The method of claim 25 wherein generating further comprises making some portions of the transactional data viewable and other portions of the transactional data summarized based on the data representing the hierarchy.

27. (Original) The method of claim 26 further comprising enabling the user to modify the data representing the hierarchy to indicate viewable and non-viewable portions.

28. (Original) The method of claim 1 further comprising notifying a subscriber of the modification.

29. (Original) The method of claim 1 wherein the hierarchy comprises a node tree.

30. (Currently amended) A method for causing a physical modification to a machine-readable medium having encoded thereon data representative of a hierarchy, the method comprising:

making a Web page available for access by a user at a first client, the Web page including

(i) locally-stored data representing the hierarchy and

(ii) rules defining those modifications to a structure of the locally-stored data representing the hierarchy that any user is permitted to make to the data;

receiving, from the user, instructions to modify the structure of the hierarchy based on real-time enforcement of the rules; and

causing the physical modification of the machine-readable medium, the physical modification resulting in the representation of the hierarchy;

wherein the real-time enforcement of the rules comprises:

performing local rule enforcement at a first client;

detecting at a server, in real-time, a modification to locally-stored data occurring at a second client; and

sending a call from the first client to the server to enforce rules involving multiple users based on detecting the modification to locally-stored data that occurred at the second client, the

call being sent before the modified data has been saved to a master representation of the hierarchy on the server.

31. (Currently amended) A system comprising
a computing device, that provides, to a user at a first client a Web page including (i) locally-stored data representing a hierarchy and (ii) rules defining those modifications to a structure of the locally-stored data representing the hierarchy that any user is permitted to make to the data;

a rule enforcement module at the first client that provides real-time enforcement of the rules including: (1) performing local rule enforcement at a first client; (2) detecting at a server, in real-time, a modification to locally-stored data occurring at a second client; and (3) sending a call from the first client to the server based on detecting the modification to locally-stored data occurring at the second client to enforce rules involving multiple users, the call being sent before modified data has been saved to a master representation of the hierarchy on the server; and

a machine-readable storage medium for storing data modified by the user.

32. (Original) The system of claim 31 further comprising a client including the computing device.

33-35. (Canceled)

36. (Original) The system of claim 31 further comprising a database including the data representing the hierarchy.

37. (Original) The system of claim 31 further comprising a network wherein the Web page is transmitted using the network.

38. (Currently amended) An article comprising a machine-readable medium storing instructions operable to cause one or more machines to perform operations comprising:

making a Web page available for access by a user at a first client, the Web page including (i) locally stored data representing a hierarchy and (ii) rules defining those

modifications to a structure of the locally-stored data representing the hierarchy that any user is permitted to make to the data;

receiving, from the a user, instructions to modify the structure of the hierarchy in real-time,

performing local rule enforcement at a first client by verifying that a proposed modification to the locally-stored data complies with the rules;

detecting at a server, in real-time, a modification to locally-stored data occurring at a second client;

sending a call from the first client to the server to enforce rules involving multiple users based on detecting the modification to locally-stored data that occurred at the second client, the call being sent before the modified data has been saved to a master representation of the hierarchy on the server; and

causing the physical modification of the machine-readable medium, the physical modification resulting in the master representation of the hierarchy.